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The purpose of the present study was to compare the performance of three groups of second-year nursing students, enrolled in the North Carolina Baptist Hospital School of Nursing, (1) after participation in sensitivity training combined with assertive training (experimental group), (2) after participation in a group session in which communication and interpersonal relationship skills were discussed and practiced, utilizing behavioral rehearsal (the IPR group), with (3) a no-treatment control group, which had volunteered for group sessions, but were placed on a waiting list during the experiment. The IPR group was studied because it paralleled the current educational method for teaching these skills.

The subjects' performances were measured by (1) an assertive behavior test conducted within the hospital environment, (2) a Patient Response Form, completed by patients to whom the subjects had administered nursing care, (3) an Instructor Response Form, completed by each of the subject's instructors, and (4) an assertive inventory, containing a fear thermometer.

It was hypothesized that the experimental group would perform superiorly to the other two groups on each measure and that the IPR group would be rated superiorly to the control group on the Instructor and Patient Response Forms.

The results showed that the experimental group made a significantly greater number of assertive responses than the IPR and

no-treatment control groups during the assertive behavior test within the hospital setting. The experimental group also responded in a shorter time period to the order than did the IPR or control groups. The Instructor Response Form showed that the experimental group was rated superiorly to the IPR and control groups on seven of the items, comprising the form. The Patient Response Form and assertive inventory showed no significant differences among the three groups.

From these results it was concluded that sensitivity training combined with assertive training (1) was more effective in insuring that nursing students act assertively in the hospital environment than an IPR or a no-treatment control group, (2) was a superior method to instruct nursing students to relate to patients and hospital staff, than the traditional educational method or a no-treatment control; and (3) enabled nursing students to better predict their behaviors in actual situations.

THE EFFECTS OF SENSITIVITY AND ASSERTIVE TRAINING UPON THE PERFORMANCE OF NURSING STUDENTS

by

Linda H. Melton

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CHAPTER I

INTRODUCTION

Statement of the Problem

Both nationally and internationally professional nursing has been "forced into a new, enlarged, and even more crucial role in health care" (Mussallem, 1969, p. 514). The need for this change sprang from encompassing problems of community health care, coupled with the rapidly increasing scope of medical knowledge. To remain abreast of these changes has required increasing specialization and larger numbers of specialists. Medical educators have reported that changes in the pattern of medical practice have contributed to the need for changes in the role of the professional nurse. Fewer medical graduates have been entering general practice (McCreary, 1968). There has also been a growing trend to integrate medical practice into the health team. With the team approach each member of the various professions, such as medicine, nursing, pharmacology, administration, physical and occupational therapy, social and vocational rehabilitation, has begun to share in the provision of more effective health care (Scott & Volkars, 1966). Inherent in the concept of a team approach to health care has been an increasing delegation of responsibility and accountability to the nursing profession.

From within the nursing profession there has arisen a simultaneous cry to the practitioner to act more independently and responsibly. For nearly 20 years there have been written provisions

to guide the nurse practitioner in implementing care. This Code for Nurses (ANA, 1968) defined the practitioner's role as an independent one with the authority to inspect and oversee with responsibility the care of her patients.

The American public has also begun to hold the nurse responsible for making judgments about their welfare. With increasing frequency the professional nurse has been held legally accountable for her actions (Jordan, 1972).

Concurrent with the changing pattern of medical practice should have been the changing role of nursing practice. However, before this latter change could be completed there were certain problems within nursing which had to be rectified. Nursing administrators and educators have defined nursing as bounded by the needs of the patient (Beland, 1970). This definition has remained in direct opposition to that espoused by many physicians, who have viewed the nurse as their "handmaiden" or attendant to assist them in medical procedures or to carry out medical orders (Duff & Hollingshead, 1968).

This dichotomy has been a source of much conflict and dissatisfaction within nursing. During their academic training nursing students have been rewarded for using their full human potential, for exercising their critical faculties, and for questioning, rather than taking the usual for granted (Reinkemeyer, 1968). In contrast, the student has observed that the behavior of graduate nurses was too often compromising in favor of the rigid hierarchical structure. In increasing numbers nursing students have been seeking other areas of

practice outside the hospital. Reinkemeyer (1968) reported that only 13 out of 117 nursing students intended to go into hospital practice after graduation. Even these few had outlined very specific and short-term reasons for choosing hospital practice. After perfecting some of the basic skills they too planned to look elsewhere to practice nursing under conditions which allowed "greater freedom and independence in carrying out nursing responsibilities" (p. 1938). Another study conducted in England by Menzies (1960) also dealt with the discontent within nursing. The hospital had had an outstanding reputation for high quality nursing care. There was a high rate of withdrawal from duty and the nurses interviewed expressed a "high level of tension, distress, and anxiety" (p. 97) which was attributed to problems with interpersonal and intrapersonal relations within the hospital setting.

Perhaps one factor which has contributed to the discontent within hospital nursing practice has been the poor quality of relations and communications between nurses and physicians. Several investigators have studied these patterns (Johnson & Martin, 1958; Wessen, 1958; Duff & Hollingshead, 1968; Bates & Chamberlin, 1970). All of these studies described the communications as basically professional and directive in character, very limited in scope, and confined mostly to orders from the physicians, which were written in the "order book". These authors hypothesized that this type of communication fostered the nurses' strong sense of mingled respect and fear of the doctors. This communication often led to confusion in care and, may have at times endangered the actual welfare of the patients.

Hofling, Brotzman, Dalrymple, Graves, & Pierce (1972), in an endeavor to obtain a picture of the nurse-physician relationship, found that 21 out of 22 graduate nurses would comply with a tape recorded telephone order to administer an obviously excessive dosage of medication. Students were given questionnaires containing hypothetical situations. All of these students believed that in this situation they would not have acted as the majority of the graduate nurses did. The students stated that the reason for refusing to give the medication was their concern that the patient would have suffered ill effects. The responses of the graduate nurses demonstrated that in the real-life situation the nurse did not always utilize her knowledge and experience in making decisions.

Another aspect of the problem of discontent has been the way in which many nurses described themselves and their professional aspirations. Nursing students showed a low interest in asserting independence or achieving success via the investment of self and energy in work, as measured by the Edwards Personal Preference Schedule (Psathas, 1968). Another study by Marram (1969) illustrated additional problems. Many of her subjects expressed discontent with the confinements and limitations of nursing roles.

Typically the hospital organization has been hierarchical and authoritarian, and the rewards for nursing innovation have been few (Christman, 1965 & Paplau, 1966). With the increasing needs of health care and the widening scope of medical knowledge, it seemed evident that changes needed to be made in the nurse-physician relationship.

It appeared imperative that an extensive effort to find ways to increase the nurse's fuller exercise of her intellectual and ethical potentialities was pursued.

Because nursing has been such a complex activity, the nurse could not fulfill her role until steps were taken to free her and maximize her effectiveness (Kreuter, 1957). Until this goal has been attained the nurse will have to continue to practice nursing within the limited scope of the past. To rectify some existing definitions of nursing, changes needed to be made in the views that nurses held of themselves; and in the views held by the public, and other health professions.

The Proposed Solution

It was the purpose of the present study to investigate a method to enhance the interpersonal relationship skills, communication skills, and leadership skills of nursing students. The performance of these skills was deemed extremely important in the administration of nursing care. Abdellah, Beland, Martin, & Matheny (1961) identified 21 major problems around which nursing care of patients has been planned. Of these 21 problems, seven were associated with the above skills.

Usually students have attended lectures about these topics or participated in group seminars to discuss these principles as they worked under the guidance of a nursing instructor in the hospital area. "Instructors of nursing have often assumed that a mastery of vocabulary, the facts, the principles, and the theories of the behavioral

sciences led to the outcome of increased sensitivity" and that students could, therefore, practice this increased sensitivity to improve their communication skills and interpersonal functioning in the hospital setting (Smith, 1966, p. 5). However, the student has often been too insecure about her own capabilities in nursing. To be able to function freely and assertively within the often traumatic hospital environment has remained an unrealistic objective for student performance.

Sensitivity and/or assertive training, the alternative approach proposed by the present investigator, has been used effectively by psychologists, educators of counselors and teachers, and occasionally by nursing and medical educators (McFall & Lillesand, 1971; Rathus, 1973; Smith, 1966; Lazarus, 1966; Geitgey, 1966, Rogers, 1970; Coleman & Golfka, 1969; Rueveni, 1970).

The group has seemed to provide a basically safe environment. Because of the presence of mutual trust, the members have been able to experiment by practicing new behaviors. Lazarus (1971) summed his views concerning the group process by stating that the "group has provided: (1) an opportunity to observe people with dissimilar problems handling relationship factors in very different ways, which allowed for active and vicarious learning of numerous interpersonal skills" (p. 188); (2) an opportunity to evaluate behaviors according to rational standards; (3) an experience in mutual trust and genuine concern; (4) a small community with common objectives of helping one another with emotional growth; and (5) "a model of honest and satisfying social interactions" (p. 191).

There has been evidence to indicate an immediate gain in positive personal behavior within the group (Solomon, 1970; Smith, 1966, Schutz, 1967; Rogers, 1970; Tannenbaum, Weschler, & Massarik, 1961). However, there has remained a need for research to substantiate the claims that the changes, observed during the group sessions, did transfer to the individual's daily encounters outside the group (Phillips & Erickson, 1970) and that the participants did become "more authentic, more expressive, less defensive, and less vulnerable human beings" (Lazarus, 1971, p. 186).

Some very relevant questions were raised by Rogers (1961). He asked if the members of the helping professions have learned to accept themselves and their own feelings about the different situations and experiences encountered when working with sick persons. He further stated that the acceptance of these feelings should have been a prerequisite to constructively helping others. Budd (1969) stated his concern about the "professionalization" of nursing and observed that the "feeling and caring among those whose life work has been helping, frequently has turned out to be feeling and caring by the book" (p. 717).

Several investigators within the nursing profession have proposed that one solution to this broad problem could be the sensitivity group. Some have approached the problem by offering sensitivity training to nurses who were practicing members of the profession. In a study previously mentioned, Marram (1969) found changes in the attitudes of graduate nurses after sensitivity training. From final individual interviews Marram concluded that the nurses who had

initially expressed low self-regard had gained self-confidence, reported an increased ability to work out problems with associates at work, and indicated an increased tolerance of individuals (p. 324). In another study Rueveni (1970) concluded that a course of six-month sensitivity training sessions were beneficial to nursing supervisors. The effectiveness of the approach was again measured by interviews and questionnaires. The supervisors stated that they had gained an ability to work more effectively with other personnel and had developed more awareness of the importance of interpersonal relations with individuals in the hospital environment.

The studies discussed seemed to have rendered favorable results. However, it was hypothesized that a better solution to the problem would have been to incorporate sensitivity training into the educational process of nursing. For the past 15 years the use of the group process as a training method in nursing education has increased. Several papers have appeared within the nursing literature, utilizing basically uniform approaches and techniques (Zinberg, Shapiro, Gruen, 1962; Budd, 1969; Racy, 1969; Coleman & Golfka, 1969; Geitgey, 1966; Yeaworth, 1970; Logan, 1969). The aims of these groups have "generally included self-understanding, sensitivity, and first-hand knowledge of the group process". The evaluations by leaders, participants, and teachers have usually been favorable (Racy, 1969, p. 2396). There has been a growing realization within nursing education that the group process might have strengths not available in other teaching modalities. Some of the investigators have aimed at discovering these strengths

within the group interaction process. However, many of the research designs have been plagued with methodological problems (Adams, 1971).

Perhaps the earliest experimentation with groups in nursing education was conducted by Rosenberg and Fuller (1955). The group leaders concluded that the goal of enhancing the students' interpersonal awareness through self-awareness was largely met. The measure of this success was again self-reports and teacher evaluations. In another study conducted by Zinberg, Shapiro, & Gruen (1962) similar results were found.

Several studies have attempted to assess the effectiveness of the group process as a teaching method during the nursing students' psychiatric experience (Garner & Lowe, 1965; Thompson, Lakin, & Johnson, 1965; Gough, 1969; Adams, 1971; Coleman & Golfka, 1969). All of these authors reported similarly positive results in favor of the experimental groups. The measurements utilized were interviews with the nursing students, their supervisors, their instructors, and their colleagues; questionnaires completed by these same individuals; daily diaries kept by the students involved in the studies; and the Tennessee Self-Concept Scale (Coleman & Golfka, 1969).

A study by Geitgey (1966) did warrant individualized mention. Geitgey assigned the 103 freshman nursing students to an experimental group, which experienced sensitivity training; a group labelled volunteer control, which received human relations training by a classroom lecture-discussion method; and a control group. The members of the experimental and volunteer control groups were drawn from a group of

students who had volunteered to participate in a 30 hour workshop in "human relations training". The subjects for the control group were obtained by selection of an equivalent number to the number in the experimental group from the remaining members of the classes. Geitgey devised sociometric forms to measure interpersonal relations of the students with instructors and peers, and a questionnaire to measure the students' nursing care as evaluated by patients. Results were significant in favor of the experimental group for the following comparisons: patient evaluation of nursing care between the experimental group and the volunteer control group; instructor evaluations of nursing care between the experimental group and both the volunteer control and control groups; interpersonal relations with instructors between the experimental group and both the volunteer control and control group; and interpersonal relations with peers between the experimental group and both the volunteer control and control groups.

All of these studies resulted in favorable outcomes proclaiming the usefulness of sensitivity training as an effective tool to generate positive feelings about oneself and others, and to increase the participants' abilities to understand and express feelings. However, there seemed to be little solid data concerning the behavioral changes that occurred after nursing students had experienced sensitivity training. Geitgey's study was a beginning step to find this information, but more evidence was needed.

Another promising method utilized within a group setting has been assertive training. Liberman (1972) stated that "the encounter

group has held much promise for teaching people new social responses through behavioral rehearsal". By reconstructing the situation within the group, individuals have been guided through situations which previously caused them difficulty (p. 100).

Lazarus (1971) stated that one of the most effective methods to teach assertive behavior was role playing or behavioral rehearsal. He further stated that assertive training groups afforded a versatile reeducative milieu for the extinction of nonassertive or maladaptive social anxieties, as well as the elicitation and support of adaptive social responses. The group provided the means through which participants were able to solve mutual problems together within an environment of honesty and acceptance. Lazarus (1968) concluded that the important idea was "to learn to handle people and problems in a cooperative and adaptive fashion" (p. 164). The majority of Lazarus' clients have reported a "transfer of assertive and expressive modes of behavior to all their interpersonal encounters" (p. 170).

Again the question returned: "How could investigators prove that what had been learned and experienced within the sensitivity group affected the behavior of the participant after he returned to his natural environment?" Herein laid the major question of the present study.

The Purpose of the Present Work

The purpose of the present study was to systematically compare the performance of three groups of nursing students (1) after participation in sensitivity training which included assertive training

(hereafter referred to as the experimental group), (2) after participation in a group session in which communication and interpersonal relationship skills were discussed and practiced, utilizing behavioral rehearsal (hereafter referred to as the IPR group), with (3) a control group, which had volunteered for group sessions, but were placed on a waiting list during the experiment. The IPR group paralleled the existing educational method for teaching interpersonal relationship and communication skills to nursing students.

The nursing students' performances were measured by (1) an assertive behavior test within the hospital environment, (2) a Patient Response Form, completed by hospital patients to whom the subjects of the study had administered nursing care, (3) an Instructor Response Form, completed by each of the subject's instructors, and (4) an assertive inventory, containing a fear thermometer.

The specific hypotheses for the present study were stated as follows:

1. Subjects in the experimental group would make a greater number of assertive responses during the behavioral test than subjects in the IPR or control group.
2. Subjects in the experimental group would report more assertive responses and fewer feelings of anxiety concerning assertive nursing situations, as measured by an assertive inventory and fear thermometers, than subjects in the IPR or control group.

3. Subjects in the experimental group would be rated as superior to both the IPR and control groups in performing nursing care and relating to patients and hospital staff. Subjects in the IPR group would be rated as superior to the control group in performing nursing care and relating to patients and hospital staff.

CHAPTER II

METHOD

Subjects and Setting

The experiment was conducted at the North Carolina Baptist Hospital. The subjects were second-year nursing students enrolled in the hospital's diploma school of nursing education. At the time of the study all of the subjects had experienced the same academic training.

The entire junior class, consisting of 93 females and one male, were given the opportunity to participate in group sessions. The groups were described as free and nonstructured in nature, and the purpose was portrayed as the improvement of their nursing care, and abilities to relate to others. Of this number 43 volunteered to participate. Ten subjects were randomly assigned to each of the three groups. They ranged in age from 19 to 24 years.

Procedure

The treatment consisted of two types of group sessions, each conducted on separate weekends at the experimenter's home. The marathon approach to sensitivity training was selected. Both groups spent approximately 26 hours in group sessions.

The experimental group experienced group sessions which dealt with present interactions within the group. The "trust walk" (Schutz, 1970) was utilized during the first hour to enhance feelings

of trust among the members of the group. In addition assertive training was conducted with each member, when nonassertive behaviors were described or displayed. Lists of assertive responses and behaviors by Salter (1949) & Rathus (1973) were utilized by the experimenter as guides in teaching these new behaviors.

The method used in the assertive training was behavioral rehearsal, briefly described as follows: if as a participant talked about herself or a situation, or as members were relating with each other, these behaviors were described as unsatisfactory by either the subject involved or other members of the group, the session was interrupted by a discussion about the situation. This discussion often included feelings about the situation, similar situations encountered by other members and their responses, suggestions for more appropriate behaviors, and possible outcomes for these responses. At the conclusion of this discussion members of the group volunteered to role play the situation until appropriate responses and behaviors were shaped. Since a tape recorder was used throughout the sessions, these various behavior rehearsal sessions could be played back thus benefiting the participants. Before leaving a topic or situation the subjects who were involved in it would take part in the behavioral rehearsal, replaying the tape, and practicing the appropriate behaviors until they and other members of the group were satisfied with the performance. Summaries of the topics discussed, maladaptive behaviors demonstrated or described, and techniques utilized to shape more adaptive or acceptable behaviors were included in Appendix A.

At the end of the weekend the members were encouraged to consider how the experiences and the newly learned responses could be transferred to their natural environments.

The IPR group experienced group sessions which consisted of lectures by various members and discussions concerning the principles of communication and interpersonal relationship skills. Prior to the commencement of the session, the experimenter surveyed several texts which dealt with the topics of interpersonal relationship skills, communication skills, person perception, nonverbal behavior, stereotyping, and self-concept. From these readings short papers were written by the experimenter. The papers were included in Appendix B. These papers were distributed among the members. Each subject orally presented one topic to the remainder of the group, and led the discussion which ensued. Behavioral rehearsal was utilized with each topic so that the subjects would have an opportunity to practice the skills about which they were learning. This method paralleled that which has often been practiced by nursing educators.

Both of the treatment sessions were tape recorded. The purpose of this was twofold: to provide feedback for the group members, concerning their verbal responses; and to provide a means of assessing experimenter bias. Two judges subsequently rated the experimenter's verbalizations on three characteristics (warmth, genuineness, and empathic understanding) as defined by Truax & Mitchell (1971). This form was included in Appendix C.

The control group did not experience any type of group training by the experimenter.

Behavioral Measure

The assertive behavior test was conducted two weeks after the completion of the two group sessions. Each subject was tested individually by the confederate during the time she was working within the hospital for academic credit. The confederate was blind concerning which subjects were in each group. The confederate, posing as a medical resident, asked each subject to administer a toxic dosage of a placebo medication to the patient to whom she was administering nursing care. This placebo had been placed in the patients' medication boxes prior to the beginning of each test situation. Two names (Satroten and Tranquid) were utilized randomly during the two days of the testing. The placebo packets were labelled as follows:

Satroten		Tranquid
5 mg. capsules	or	5 mg. capsules
Maximum daily dosage: 10 mg.		Maximum daily dosage: 10 mg.

The written order given to each subject by the confederate requested an administration of 30 mg. of the medication, immediately, orally.

The subject's response to the confederate was labelled assertive or nonassertive. The confederate had been trained to define an assertive response as a statement of refusal to administer the drug. He also recorded the length of elapsed time between the point at which the subject received the order and the point of decision to either administer or refuse administration of the drug. If the subject refused to administer the medication the confederate accepted this decision and cancelled the order. If the subject did not refuse to administer the medication and proceeded to the patient's room, she

was called from the room by the confederate prior to administration. He then stated that he had changed his mind and wished to cancel the order.

All members of the nursing staff were informed prior to the testing period that some research with the nursing students, concerning medication policies, would be carried out in the hospital. They were asked not to help the subjects in their decision-making process. If approached by a student the nurses responded that they did not have time to help and that the decision must be the student's.

Paper and Pencil Measures

During the Fall quarter of the subjects' academic training, all of the nursing students completed the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960, p. 353). This was administered six months prior to the training sessions to decrease any connection between the scale and the manipulations.

Each subject was evaluated by three of the nursing faculty four weeks before and again five weeks after the experimental treatment. The choice of instructor was determined by which instructors were presently working with the subject in the hospital. The instructors were blind concerning which subjects belonged to each group. The method of evaluation was a Likert Attitude Scale, developed by the experimenter to assess communication skills and sensitivity, as defined previously. The sources utilized in constructing the scale were Rogers (1970), Alberti & Emmons (1970), and Geitgey (1966).

Subjects were also evaluated by the patients to whom they had administered nursing care. These ratings were collected by the experimenter during a five week period beginning one week after the experimental treatment. Ten of these Likert Attitude Scales, developed to assess the patients' feelings about the subject and the quality of care administered, were completed on each student. When the patients were asked to complete the forms, they were told that the information would not be shown to the students and that it would be kept confidential.

The last paper and pencil measure utilized in this study was an assertive inventory. This was administered to the subjects six weeks after the termination of the group sessions. The fear thermometer was placed at the bottom of each situation. The purpose was to compare the subjects' responses on the paper and pencil measure with their actual behavior.

The five situations, constructed by the experimenter, have occurred with a high rate of frequency within the hospital environment. All involved nurse-physician interactions, and were hypothesized by the investigator to evoke a great deal of anxiety and conflict within the nurse practitioner.

Prior to the experiment the five items were given in an open-ended format to a group of graduate nurses. These 50 R. N.'s represented a cross-section of educational backgrounds and work settings. From these responses the experimenter constructed the final assertive inventory in multiple choice form. Again the five situations with the fear thermometers were administered to graduate nurses. Ten

professional nurses were given definitions of assertive behavior (Wolpe & Lazarus, 1966, p. 39; Alberti & Emmons, 1970, p. 7) and instructed to choose the response that would best fit the definitions. These nurses were chosen at random from the staffs of the two hospitals in the community in which the research was conducted.

CHAPTER III

RESULTS

After random assignment of the subjects, a one way analysis of variance was computed to be sure that the groups' grade point averages did not differ. No significant differences were found ($F = .38, 2, 27$).

The investigator's taped verbal responses during the two treatment sessions were rated by two judges to determine if bias was shown by the experimenter toward either group. The interrater reliability, established by a Pearson product moment correlation coefficient, was .98. The scores given the investigator on each tape were highly similar ($r = .99$). This indicated that the experimental results were not due to bias on the part of the experimenter.

At the time of debriefing the subjects were asked if they were aware of the experimental circumstances during the times of testing. The subjects' responses indicated that six of the IPR group were aware of the experimental conditions during the assertive behavior test in the hospital setting.

Assertive Behavior Test

The Fisher exact test was utilized to compare the three groups. As indicated in Table 1, the experimental group made a significantly greater number of assertive responses than did the control group

($p = .03$). There was no significant difference between the experimental and IPR group, or between the IPR and control.

TABLE 1

Frequency of Assertive and Nonassertive Behaviors

	Cell Frequency Distribution		
	Experimental	IPR	Control
Assertive	8	2	3
Nonassertive	2	2	7

The length of elapsed time before each subject decided to make an assertive or nonassertive response was recorded. The elapsed time was that which occurred between the point at which the subject received the order and the point at which the decision was made to either give the medication as ordered or refuse. The analysis of variance shown in Table 2 indicated that the differences among the three groups were statistically significant.

TABLE 2

Analysis of Variance of the Length of Elapsed Time before the Behavior

Source	df	MS	F
Treatment	2	234.38	8.01**
Error	21	29.25	
Total	23		

** $p < .01$

Newman-Keuls tests were performed on the elapsed time data. As shown in Table 3, the experimental group differed significantly from the IPR and control groups. The IPR and control groups did not differ from each other.

TABLE 3

Tests on Differences between All Pairs of Means

Treatments		Experimental	IPR	Control		
	Means	6.3	14.3	15.6	r	Newman-Keuls
Experimental	6.3	—	8.0*	9.3*	3	7.34
IPR	14.3	—	—	1.3	2	6.05
Control	15.6	—	—	—		

* $p < .05$

The degree of association (w^2) showed that 39% of the variance of the amount of elapsed time was determined by the treatment group.

Paper and Pencil Measures

Utilizing the Pearson product moment correlation coefficient, interrater reliability was calculated between the three instructor ratings on both pre and post treatment measures. None of the reliabilities dropped below .87.

A one way analysis of variance indicated that there were no significant differences among the three groups on pre treatment responses to any of the 12 statements.

Change scores for each of the 12 items on the form were also analyzed by a one way analysis of variance. Seven of these were found to be statistically significant, showing a difference in amount of

change among the three groups after completion of the treatments. Table 4 summarized this data for all 12 of the statements.

Of the seven variables which showed statistical significance, all clearly demonstrated directional changes in ratings in favor of the experimental group. Newman-Keuls tests were calculated on the change scores. The experimental group differed significantly from both the IPR and control groups on statements D, G, I, and K ($p < .01$). The experimental group differed significantly only from the control group on statements C, J, and L ($p < .01$). The IPR group differed from the control group on statement L ($p < .01$).

A one way analysis of variance was utilized to evaluate the statements comprising the Patient Response Form. None of these was significant.

The assertive inventory showed that no less than 60% of the subjects in each group agreed with the registered nurses' choices in each of the five situations. These choices were included in Appendix D - Table 28. A one way analysis of variance showed no significant differences among the three groups. Analyses of variance were also computed on each fear thermometer which accompanied the five assertive situations. None of these revealed a significant difference concerning the subjects' feelings of anxiety during the hypothetical situations.

The subjects' responses on the Marlowe-Crowne Social Desirability Scale were compared with their responses on the behavior test by means of the Mann-Whitney Test for two individual samples. The result was not significant ($z = .076$), indicating no relationship between the score and the subject's behavior in an assertive situation.

TABLE 4

Mean Change and F Ratio for Statements on Instructor Response Form

Statement	Mean Change (Post Minus Pre Scores) Exp.	IPR	Con.	F
A. The student seems to have a positive attitude about her (him) self.	.672	.923	.559	.23
B. The student contributes to group activities in accord with his (her) ability.	.855	.124	@ .566	2.71
C. The student does not express an awareness of others' feelings.	.695	@ .351	@ .933	3.92*
D. The student seems anxious in the presence of authority figures.	2.661	.823	@ .066	16.34**
E. The student seems sensitive to his (her) own feelings.	.952	.611	@ .033	2.47
F. The student openly expresses negative feelings.	.710	.132	@ .933	3.07
G. The student openly expresses positive feelings.	1.929	@ .612	@ .899	16.45**
H. I enjoy talking with and working with this student.	.395	@ .075	@ .603	2.58
I. The student seems offended by constructive criticism.	1.884	@1.631	@ .946	22.15**
J. The student does not assume responsibility for his (her) actions.	.835	.013	@1.00	4.82*

TABLE 4 (CONTINUED)

Statement	Mean Change (Post Minus Pre Scores) Exp.	IPR	Con.	F
K. The student has difficulty expressing ideas well and understandably.	2.246	.049	@ .698	13.88**
L. The student seems confident of his (her) ability to perform nursing functions.	1.110	.712	@ .898	8.74**

Note. -- The symbol (@) refers to a better pretest than post test performance.

* $p < .05$.

** $p < .01$.

CHAPTER IV

DISCUSSION

The first hypothesis of the present study that the experimental group would make a greater number of assertive responses was supported. As shown in Table 1, the experimental group responded more assertively than did the no-treatment control group. The IPR group did not differ statistically from the control group. Since this experimental test was conducted in the students' natural work environments, the data substantially supported previously mentioned reports which acclaimed the value of this technique (Alberti & Emmons, 1970; Lazarus, 1971 and 1968; McFall & Martson, 1970; and McFall & Lillesand, 1971).

Further support for the first hypothesis was reported in Tables 2 and 3, which showed that the experimental group responded significantly faster than the IPR and control groups.

It was regretful that the responses of all of the members of the IPR group could not be included in this data. This group was studied because it paralleled the existing educational method used to teach interpersonal relationship and communication skills to nursing students.

In addition to the aforementioned data, it was interesting to note the behaviors of the subjects during this portion of the experiment. The confederate reported that those who would eventually respond

assertively seemed more relaxed in the situation, and more assured of their decisions once made, than did those who would have given the medication as ordered. This later group made several inquiries of other students and graduate nurses, repeatedly returned to the confederate checking the dosage, and generally presented outward expressions of confusion and indecision. As previously stated, the staff nurses were instructed not to help the subjects. Perhaps there would have been a greater number of assertive responses if the staff nurses had been allowed to respond to the subjects' inquiries.

The second hypothesis that the experimental group would report more assertive responses and fewer feelings of anxiety concerning assertive nursing situations on an assertive inventory and fear thermometers was not supported. Although the inventory showed no statistical significance, the subjects' comments on the situations did warrant mention. Most of the subjects chose the assertive responses in each of the situations and did not rate any to be anxiety provoking. In the one situation which paralleled the assertive behavior test 80% of the experimental and control groups stated that they would act in an assertive manner. In actuality only 30% of the control group acted assertively in the hospital environment. In contrast the experimental group more accurately predicted their behaviors (70%). Hofling, Brotzman, Dalrymple, Graves, & Pierce (1972) also found the reactions of nursing students on questionnaires containing hypothetical nursing situations to be the same as in the present study. These measures demonstrated the discrepancy between what the student thought she would do in a given situation and the actual behavior.

As the data demonstrated, the nursing students did not utilize their knowledge when relating to physicians. Although the exact reason for this inadequacy was not found within the study, the experimental treatment offered a method to insure appropriate assertive behaviors.

The third hypothesis that subjects in the experimental group would be rated as superior to the IPR and control group in performing nursing care and relating to patients and hospital staff was supported by the Instructor Response Form. Table 4 summarized this data and clearly demonstrated that there were changes among the three groups on seven of the 12 items after the treatment periods. Newman-Keuls tests also demonstrated that the experimental group was rated superiorly to the IPR and control groups.

The third hypothesis also stated that the IPR group would be rated superiorly to the control group. This hypothesis received little support.

Several authorities (Rogers, 1970; Solomon, 1970; Smith, 1966; Schutz, 1967; Tannenbaum, Weschler, & Massarick, 1961) have reported their belief in sensitivity training as a valuable tool to potentiate healthy, positive feelings about oneself and others, and to increase members' abilities to relate to others within the group setting. Previous data (Coleman & Golfka, 1969; Marram, 1969; Rueveni, 1970; Racy, 1969; Geitgey, 1966; Zinberg, Shapiro, & Gruen, 1962; Garner & Lowe, 1965; and Adams, 1971) with similar results have been limited to self-reports, diaries, and questionnaires. The present study, which demonstrated that there were concrete behavioral changes which

occurred after and outside of the group process, seemed to more substantially support the theories of the aforementioned authorities.

The Patient Response Form, which showed no significant differences, did not support the portion of the third hypothesis which dealt with nursing care and abilities to relate to patients, as rated by patients. The experimenter was specific with each patient rater about the purposes of the form and the fact that the responses would not influence student grades. It was possible that the patients were not objective about their ratings, because the students were consistently given high ratings by most of the patients. This data was not consistent with that reported by Geitgey (1966).

The lack of support of the hypothesis that the IPR group would be rated superiorly to the control group, reaffirmed that the traditional educational method was not fulfilling the objectives of the educators using it.

Suggestions for Future Research

It was the present investigator's hypothesis that assertive training was essential before abilities, learned within the safe environment of the sensitivity group, could be transferred to the natural environments of the subjects. For this reason the two techniques were combined. The investigator also desired to test scientifically the existing educational method for teaching interpersonal relationship and communication skills to nursing students (IPR group). Thus these two groups were selected for the present study. It was evident that the two approaches (sensitivity and assertive training) utilized in the experimental group needed to be compared in future research.

Several techniques, such as modeling, reinforcement, behavior rehearsal, and practice in expression of thoughts and feelings, were also used within the experimental group sessions. These components needed to be evaluated individually in future research.

CHAPTER V

SUMMARY

The purpose of the present study was to compare the performance of three groups of nursing students (1) after participation in sensitivity training which included assertive training (the experimental group), (2) after participation in a group session in which communication and interpersonal relationship skills were discussed and practiced, utilizing behavioral rehearsal (the IPR group), with (3) a no-treatment control group, which had volunteered for group sessions, but were placed on a waiting list during the experiment.

The experiment was conducted at the North Carolina Baptist Hospital. The subjects were second-year nursing students enrolled in the hospital's diploma school of nursing education. After volunteering to participate in the groups, 30 students were randomly assigned.

The subjects' performances were measured by (1) an assertive behavior test conducted in the hospital setting, (2) a Patient Response Form, completed by patients to whom the subjects had administered nursing care, (3) an Instructor Response Form, completed by each of the subject's instructors, and (4) an assertive inventory, containing a fear thermometer.

The hypotheses of the present study were stated as follows:

1. Subjects in the experimental group would make a greater number of assertive responses during

the behavioral test than subjects in the IPR or control group.

2. Subjects in the experimental group would report more assertive responses and fewer feelings of anxiety concerning assertive nursing situations, as measured by an assertive inventory and fear thermometers, than subjects in the IPR or control group.
3. Subjects in the experimental group would be rated as superior to both the IPR and control groups in performing nursing care and relating to patients and hospital staff. Subjects in the IPR group would be rated as superior to the control group in performing nursing care and relating to patients and hospital staff.

The assertive behavior test was conducted two weeks following the completion of the two treatments. The subjects were evaluated on the Instructor Response Form before and after the treatment sessions. Patient Response Form ratings were gathered following the treatment sessions. The assertive inventory and fear thermometers were completed by the subjects six weeks following termination of the group sessions.

From the results of statistical analyses it was concluded that sensitivity training combined with assertive training (1) was more effective in insuring that students would perform assertively in the hospital environment than IPR training or a no-treatment control; (2) was a superior method for the instruction of interpersonal

relationship and communication skills, as compared with the traditional educational method and a no-treatment control; and (3) enabled nursing students to better predict their behaviors in assertive nursing situations.

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APPENDIX A

(SUMMARIES OF EXPERIMENTAL GROUP SESSIONS)

Friday evening:

The subjects engaged in the typical, initial period of confusion and awkward silences for approximately two hours. There were some polite social interactions and attempts by various members to break the silences with jokes or light humor. Following this period the experimenter asked the group about past experiences with group sessions. This led to a discussion regarding the trustworthiness of the group. Most were hesitant to trust others because of past experiences in dyadic or group relationships. In an endeavor to promote a beginning feeling of trust the subjects participated in the "trust" walk (Schutz, 1967). Afterwards the subjects talked about the thoughts and feelings experienced during and after the exercise. The mood of the group seemed positive and relaxed. The session was ended for the evening.

Time: approximately 6 hours.

Saturday morning and afternoon:

The morning session was begun with a brief summation of Friday evening's occurrences by the experimenter. The group again discussed past experiences. One member talked about her feelings toward her father and how she wished she could hug him and tell him how much she loved him. Other members had similar problems. The experimenter suggested an exercise to practice these skills. Each member was praised by every other member. The experimenter modeled this behavior and then each member took her turn as recipient of positive statements from every other member. The feelings experienced as reinforcer and as recipient of praise were discussed.

Following this period, behavior rehearsal was used to teach the subject to express feelings toward her father. Members, who felt relaxed in this role, first modeled the behavior and then others who desired participated.

One of the less-verbal members of the group was asked to participate in the behavior rehearsal. She declined, stating that she could already do this well. The group became angry, and several negative feelings were expressed toward this member. She was defended by another student, who led the group to realize that there might be other reasons for the refusal. The "shy" member talked about her fears of rejection. The group was very supportive and reinforcing. Several told about similar feelings. Eventually a very positive feeling was present between the members. This was evidenced by positive statements, smiles, and overt expressions of warmth (e. g. touching and hugging). The session on Friday was cited as a help in learning these behaviors. The experimenter reinforced this statement and further expounded upon this and other values of behavior rehearsal.

Time: approximately 8 hours.

Saturday evening:

As the group reassembled there seemed to be a feeling of happiness, excitement, or comradery. The members had hurried through dinner, stating that they wanted to get back to the group session. One member stated that she had difficulty relating her feelings to her roommate and hoped that the group could help her. Several other

members stated a similar need, but agreed to help with the first problem mentioned. Briefly the problems were these: an inability to refuse unwanted dates, or social invitations; an inability to meet people with ease, an inability to express differing opinions or attitudes to friends, acquaintances, or instructors; and an inability to accept praise without acting embarrassed.

The experimenter pointed out the broad similarity among these situations, and discussed the meaning and application of assertive training, as a solution to these unacceptable behaviors. Following this discussion behavior rehearsal was used to teach more appropriate ways of relating to the member's roommate. The experimenter served as a model for the subject's behavior. Various members participated and were reinforced by the experimenter and other members for appropriate behaviors and verbalizations.

Time: approximately 5 hours.

Sunday morning:

Two more of the situations were discussed. More appropriate responses were again shaped through positive reinforcement and behavior rehearsal. The remainder of the situations were not handled by the group, because the members believed that they could generalize from those discussed.

The session was concluded with a discussion of ways to apply what had been experienced and learned in the sessions to each member's natural environment.

Time: 6 hours.

APPENDIX B

(INFORMATION DISCUSSED DURING THE IPR SESSIONS)

Communication Skills

"It is unfortunate that our society spends so much time teaching its members arithmetic and history, and so little time showing them how to share thoughts and feelings with one another. The result is a large group of alienated, lonely, anxious people who do not know how to communicate effectively, are not as creative, productive, or as happy as they could be, and who do not understand why they feel vaguely unfulfilled" (Piaget, p. 155).

For training purposes, communication may be defined as an ordered process of data transfer from one individual (the sender) to another (the receiver). The sender's job is to transmit a message as clearly as possible; the receiver must accept the message without modifying it in any way, and then let the sender know that this message was received. Then the participants usually switch roles: the new sender originates a message based in part on the information he has just received, transmits it to the new receiver, and the process continues. Spontaneous, two-way communication involves the rapid and continual exchange of roles, with each party alternately functioning as sender and receiver. The sender is taught to be a powerful sender and receiver of messages. The powerful sender transmits messages clearly, quickly, and accurately, in a manner the listener finds easy to understand. The powerful receiver facilitates transmission, makes sure he understands what was sent, and then firmly

acknowledges receipt of the message. The presence of these qualities promotes rewarding and successful interaction; in their absence, communication is not effective and eventually breaks down.

Some of the performance characteristics are described below:

1. Intention to communicate: The sender looks and acts as if he wants to be understood, and makes sure that he is understood. The listener looks and acts as if he wants to understand, and makes sure he does understand. Communication vehicles include attention, acknowledgement, reflection, verification, vocal quality, and other nonverbal cues.
2. Role clarity and division: The sender sends, the receiver receives. Participants try not to do both at once or send simultaneously.
3. Verbal skill: The sender delivers his message clearly and concisely.
4. Affective skill: Participants take responsibility for and advantage of their ability to communicate on a feeling level. This involves the ability to communicate empathy, positive regard, and emotive empathy.
5. Congruence: The sender looks and sounds the way he says he feels. Verbal and nonverbal behaviors transmit similar messages. Attention and interest are never faked.
6. Facilitation: The sender makes it easy for the listener to hear his message by tailoring the method and intensity of its transmission to the particular strengths and weaknesses of the receiver.

The receiver makes it easy for the sender to send by creating a receptive, nonjudgmental atmosphere. Participants reinforce one another for communicating.

7. Troubleshooting: Participants are able to recognize and modify contra communicative behavior in themselves and one another. Bad communication may involve unintentional response patterns, destructive intent, or manipulative intent. Successful troubleshooting depends primarily upon perceptivity, feedback, and technical skill.

8. Personal qualities: Intelligence, personality, sensitivity, flexibility, anxieties, tension level, self-image, energy level, and many other personal characteristics help determine an individual's ability to communicate effectively.

Communication breakdowns occur when several desirable performance characteristics are absent. These breakdowns usually reflect the presence of maladaptive habits and/or the absence of necessary skills.

1. The participant may possess certain response patterns which serve to inhibit, rather than facilitate, effective communication.
   a. When part or all of the sender's behavior is designed to produce internal gratification directly (bypassing the receiver), a "short circuit" develops, resulting in considerable energy drain. Short circuit reactions usually occur in the service of anxiety reduction, although other types of motivating behaviors (for example, anger, sex drive) may be involved, as well. "Nervous" habits (such as giggling,

loss of eye contact, and inappropriate anger) exemplify the kind of behavior which leads to inefficient communication. Anxiety reduction is a powerful reinforcer, and such habits are often very difficult to eliminate.

b. Certain spurious reactive components may be relections of residual habits: responses which at one time served a purpose, but are no longer necessary and have become more of a hindrance than a help. These behaviors are maintained through a self-reinforcement mechanism: they have been a part of the sender's response pattern for so long that dropping them would introduce anxiety-producing novelty into his life. It is easier to continue utilizing the same antiquated behaviors than to learn new and more appropriate ways of responding.

2. The sender or receiver may not possess certain interpersonal skills necessary for effective, powerful communication to occur. The problem is what the patient is not doing. He must be taught ways of responding.

The role of listener is often considered by many to be mostly a passive one. This is certainly not true. The effective listener or receiver must be adept in four vital areas: he must focus much attention on the sender, he must check on the accuracy of his intack, he is good at rewarding the sender for communicating, and he can understand the feelings behind the message he receives as well as the thoughts contained in it.

On a personal level there are four problems which frequently limit the effectiveness of human interaction. These are (1) lack of interpersonal trust, (2) defensive communication, (3) "gaps" between people, and (4) feelings of alienation. To the extent that these problems can be avoided or resolved, your interpersonal communication can be greatly enhanced. (Piaget, 1972)

Discussion:

1. From these paragraphs on communication skills I would like for you to choose anything which you feel would be beneficial to discuss within the group as a whole. Some of this may be repetitious to you and others, and if so do not bother repeating it. Pick out areas which may be new to you, somewhat unclear as discussed, or those which you think often present problems in communication and therefore need special attention as we learn to improve our skills.
2. I will be asking the group as a whole to participate in two exercises aimed at pointing out the four problems mentioned directly above. The problems will be demonstrated and then corrected. Any comments you can make concerning integration of theory presented in the previous paragraphs will be very welcome, for you are the experts in this area for the group.
3. Instructions given group by experimenter:
   a. Open-mindedness exercise.

      Three students are to carry on a conversation about a topic for which they have differing views. They will express views and others are to respond. Others are to observe

for the degree of open-mindedness each student demonstrated and to discuss the validity of the responses. Now the three are to discuss the comments made by others. Others are to observe this discussion. After discussion the observers are to watch for differences in the ways that responses are made. How does the topic differ? Topics offered for discussion: legalization of marijuana, legalization of abortion, women's liberation, aid to foreign countries (North and/or South Vietnam), busing and other forms of integration, demonstrations, welfare. The group discussed legalization of abortion.

b. Alienation exchange exercise.

Think of a person who is particularly alienated from you, but you feel that this person should be important to you. Tell about specific topics which you feel alienate you from this person so that someone can role play the person. My suggestion is to use student-instructor relationship or interaction with a person of another race. Others are to observe for evidences of communication denial on the part of each person and the responses of the other person to these denials. We will then discuss and suggest ways to break down the barriers. Next others may participate in the behavioral rehearsal to try new responses. The group discussed student-instructor situations experienced by the group members.

Interpersonal Relationships

Interpersonal relationships are essential to man in his quest for self-actualization. Communication is crucial in relationships and feelings are crucial in communication. Communication and other interpersonal behavior is learned behavior and thus can be modified. Man can control, and therefore change, some of his behavior and in the process modify other behaviors which he cannot control directly. As he modifies his own behavior and offers something different to others, he will get different, and usually more rewarding, responses from others. Thus man can promote and facilitate his own self-actualization through his own interpersonal behavior. He does not have to be a passive recipient of what life and other people offer; he can make things happen himself.

Communication is the key to competence in interpersonal relationships. By communication, I refer to a two-way process wherein each party shares or discloses information about himself which is received and understood by the other party. This kind of communication is the vehicle by which relationships are established and maintained.

One simple way to look at relationships is in terms of two variables: (1) what is being offered and (2) what is being sought. Each person does, through his behavior, express or offer certain things to the other. Each also wants, expects, hopes for, demands, or in any way seeks certain responses from the other. In addition to what

is offered and what is sought, these "seven variables of interpersonal behavior should be considered:

1. Involvement - the extent of contact or interaction between the parties in the relationship.
2. Responsibility - the extent to which each party exercises control, direction, and guidance of his own and/or the other's behavior.
3. Freedom - the extent to which each person allows himself and the other unrestrained, unrestricted behavior in the relationship.
4. Empathic understanding - the extent to which each person "receives" the other, knows him, and perceives him as if in his shoes.
5. Openness - the extent to which one is real, honest, genuine, and congruent; one's capacity to experience all aspects of his own organism and to share that experiencing with another; self-disclosure.
6. Caring - the extent of liking, affection, valuing love, friendship, or concern which the parties feel for each other.
7. Acceptance - the degree to which positive regard or caring is unconditional; a willingness for the other to be what he is without any changes required or demanded as conditions for caring" (Fitts, p. 35, 1970).

Person Perception

"Since our knowledge of and expectations about others are determined in part by impressions we form of them, it is appropriate now to consider the phenomenon of person perception. A glance at someone's portrait or at someone passing on the street gives us some ideas about the kind of person he is; even hearing a name tends to conjure up pictures of what its owner is like. And when two people meet, even if only for an instant, they form impressions of each other. With more contact, they form fuller and richer impressions that pervade their entire relationship. These impressions determine how they behave toward each other, how much they like each other, whether the two associate often, and so on. First impressions are one of the major determinants of social interaction." Consider this situation (Freedman, p. 31).

A murder trial hinges on the testimony of one witness. The jury's belief in this witness, which will determine their decision, depends almost entirely on the impression they form of him in his brief time on the witness stand. They examine his face, his features, his clothes, the quality of his voice, and his answers and try to decide what kind of person he is.

One important tendency is that people form extensive impressions of others on the basis of very limited information. Having seen someone or even his picture for only a few minutes, people tend to make judgments on a large number of his characteristics. Individuals may

not be overly confident of these opinions, but they are willing to estimate the other's intelligence, age, background, race, religion, honesty, warmth, etc. Moreover, given a few pieces of information, people tend to form consistent characterizations of others.

When people look at a house, a car, or any other complex object, they usually get a mixed impression. It is large, attractive, needs painting, is cold and unfriendly, and so on. In viewing the house or other object they do not force themselves to conclude that the whole house is warm or attractive. Objects do not have to be consistent. But when another person is the object of this kind of judgment, there is a tendency to view him as consistent, especially in an evaluative sense. A person is not seen as both good and bad, honest and dishonest, warm and frightening, considerate and sadistic. Even when somewhat contradictory information about someone is known, he usually will be perceived as consistent. The perceiver distorts or rearranges the information to minimize or eliminate the inconsistency. There are strong tendencies toward forming a unified impression of another person, even when we attempt not to do so.

How do people form impressions of others? How do we put together many pieces of information about another person? Most research data shows that people form an overall impression by averaging all traits but giving more weight to the highly positive or highly negative traits.

Also most people assume that they can determine other people's emotions and know what their personalities are like. But how accurate are these perceptions? It would seem that people must be fairly

accurate in order for society to function as smoothly as it does. Since most interactions proceed without serious conflict or mistake, person perception must be fairly accurate. But do they? Perceptions based upon our knowledge of society (for example, how it works, or roles - we can pick out a salesclerk in the clothing store by certain clues - or uniforms, or cues such as objects frequently seen with the person - such as a briefcase with a businessman) are usually quite accurate, but also quite different from those impressions when the cues are lacking. Under many circumstances, people are forced to make judgments of emotions and personalities from the facial expressions, gestures, and behavior of others when these external cues are absent.

One problem is that we assume that individuals have internal states - feelings, emotions, and personalities. We attempt to make judgments of these internal states of human beings. We look at people and perceive them as being angry, happy, sad, or frightened. We form an impression of another person and think of him as warm, honest, and sincere. We also make judgments about such internal characteristics as a person's attitudes toward various issues. We guess if he is a Republican or a Democrat, religious or nonreligious, promiscuous or not promiscuous. These judgments are extremely difficult to make. Since the internal state cannot be observed directly - it must and often is inferred from whatever cues are available.

What kinds of internal judgments are made from these external cues about the internal states? We often make the judgment of whether a person is happy or frightened, etc. - how he is feeling. How accurately can people make inferences about the emotional states of

others? One important variable is which emotions the person is trying to determine. Some are very difficult and others seem to be relatively easy. Woodworth, a psychologist, suggested that emotions can be arranged on a six-point continuum with confusion between any two emotions being inversely related to the distance they are from each other. The six groups are:

1. love, happiness, mirth
2. surprise
3. fear, suffering
4. anger, determination
5. disgust
6. contempt

People are able to distinguish emotions in categories that are three or five points apart - they rarely confuse happiness with disgust or contempt with surprise. But we are much poorer at discriminating emotions that are closer on the continuum.

We have been told that we often identify our own emotions by our physiological state, or our mental state - how we feel. Recently it has been shown that this is not true. The evidence states that all emotional reactions are biochemically similar, that is, all internal physiological characteristics are indistinguishable. What we actually do is label our internal feelings by the external cues present at the time. Therefore, the labels we often give to others' emotional states are influenced by our emotional feelings. The problem becomes that one person's impressions of how an emotion is shown or one person's spontaneous expression is not necessarily the same as another person's.

We as judges of others' emotions are influenced by a wide variety of factors relating to ourselves, the person being judged, and the situation in which the judgment is made. Our needs and

feelings greatly influence our perceptions of others. We tend to project our own feelings onto others and at times are more sensitive to particular characteristics of the person or the situation because of our present emotional state.

There is also strong evidence supporting the hypothesis that people tend to infer from the presence of one trait in an individual that other traits are also present. Knowing someone is intelligent causes most people to expect him also to be imaginative, clever, active, conscientious, deliberate, and reliable. People see certain traits as going together and assume that if someone has one of these that he also has the others. We all categorize people into a limited number of types, and when we meet anyone we do not know, we try to fit him into one of these molds. If we discover that he has some of the traits supposedly characteristic of a particular type, we assign him to that type. Once he is stereotyped, of course, he is assumed to have all the other traits belonging to that type. In this way, our theories about certain personality types influence our perceptions of others.

Another phenomenon is our tendency to perceive other people primarily in terms of good and bad and then deduce all other qualities from this decision. You may have heard of the halo effect, in which the person is labelled as good and a positive aura surrounds him and all good qualities are attributed to him. Of course, this can also apply to all bad qualities - the devil effect!

There is also a tendency for people to assume that others are similar to them. This is particularly true when they are known to be similar in demographic features such as age, race, national origin,

and socioeconomic status. Thus if two people rate themselves and each other on a variety of traits, their perceptions of themselves is an important determinant of their perceptions of the other. First, the individual rates the other person more similar to himself than he actually is; he distorts the other's personality so as to make it more like his own. Second, this distortion usually is so great that his rating of the other person corresponds more to his own personality (as he sees it) than to the other's personality (as the other sees it).

Perception is also affected by one's previous expectations regarding the other person. Whether or not we expect to interact with someone in the future affects our perception of him. If further interaction is anticipated there is a tendency to reduce negative perceptions and give greater weight to positive ones - the impression of the other is altered to make the upcoming interaction seem more desirable.

Each of us tends to organize the world and, in particular, other humans in our own terms and to use these terms for all our perceptions. Whenever we meet someone, we form an impression of him in terms of the characteristics we consider important. Regardless of what the other person is like, our impression tends to be organized along personality dimensions which we have used before. Obviously, people do not see the world in the same way; they emphasize different aspects of other people, notice and focus on different qualities. (Freedman, 1970)

Discussion:

1. How do people form impressions of others? What influences these impressions and their formation? Give specifics to help the others understand the processes.
2. What are some of the reasons for inaccurate impressions of others? Again be specific and try to think of personal experiences which relate to these mistakes.
3. How can you utilize this information as you meet others? How can this knowledge benefit you as a nurse?

Stereotypes

Stereotyping is the process which refers to something conforming to a fixed or general pattern and lacking individual distinguishing marks or qualities, especially a standardized mental picture representing a judgment of a group. As we utilize stereotyping in making assessments about people we should begin with the most central difference between one group and another and gradually move toward the details. We all use stereotyping in our initial meetings and judgments of others. The educational aspect should be that these be utilized in a beneficial way rather than as the only method of making predictions about the actions of the person.

Suppose we have knowledge of a group. The problem still remains of applying the knowledge of the group to predicting persons in the group. The use of typical cases is a way of simultaneously learning a stereotype and applying knowledge to persons. You can utilize the information which you have about people whom you know well when you are making judgments about people whom you know less well. As a nurse you need to know the typical case well. The more intense your exposures are to the typical case, the more able you will be to utilize this information in making judgments about the values, thoughts, and behaviors of those whom you do not know well.

A critical problem in the use of typical cases is knowing how typical a person is and in what ways he is typical. Let's try the following exercise to assess how well our judgments agree with the

judgments of the person, Morgan. We shall learn that in some ways he is typical, but in other respects he is not.

The Case of Morgan Jones

Morgan is a 22 year old unmarried college senior who is planning to study psychology in graduate school. His parents died when he was four, and he and his younger brother were raised by permissive grandparents in Brooklyn. Of his childhood, Morgan said, "As I grew up, I always had the feeling that I was inferior to everybody else because I had no parents. In grade school, I was very loud and boisterous and made persistent attempts to dominate my peers and to excel in everything I did." Today he places emphasis on being a "well-rounded scholar". About his values, he now says: "I do not believe there are any determining forces in the universe that make us what we are; everybody rules his own destiny. I can think of nothing more important than being a good friend or have good friends, but I don't think it is possible to have more than a few really close ones. I place little value on material things: cars, clothes, etc."

Morgan filled out the Strong Vocational Interest Blank that requires the respondent to answer "Like, Indifferent, Dislike" to a long list of interests. Below are the interests to which Morgan responded. How do you think this person responded to the interest blank? Write either Like or Dislike beside each interest. How well do you stereotype?

	Interest	Your answer	Morgan's
1.	Driving an automobile	_____	_____
2.	Meeting and directing people	_____	_____
3.	Progressive people	_____	_____
4.	Independents in politics	_____	_____
5.	People who have done you favors	_____	_____
6.	Quick-tempered people	_____	_____
7.	"Roughhouse" people	_____	_____
8.	Music teaching	_____	_____
9.	People who talk very loudly	_____	_____
10.	Acting as a cheerleader	_____	_____
11.	Fortunetellers	_____	_____
12.	People who always agree with you	_____	_____
13.	Floorwalker	_____	_____
14.	Politicians	_____	_____
15.	Economics	_____	_____
16.	Travel movies	_____	_____
17.	Thrifty people	_____	_____
18.	Regular hours for work	_____	_____
19.	Taking long walks	_____	_____
20.	Helping others	_____	_____

Stereotypes dominate our judgments. Contrary to widespread opinion, the dominance is usually helpful, for our stereotypes often lead us to surprisingly accurate judgments of a person. No person, however, is a completely typical member of any group or combination of groups. (Smith, p. 81, 1966)

Nonverbal Behavior

Imagine that you're at a party and your hostess suggests a get-to-know-the-others game, without words. You can, she says, come up close to your partner and look him over, touch him, sniff him, hug him, use sign language, but you must not say one word. The first thing you would learn from this experience is how limited wordless communication is. The next thing you might realize is how seldom you touch people; how uncomfortable it is to be stared at, at close range; how disturbing to be sniffed. Eventually, you might recognize that the one thing nonverbal communication does express very efficiently is emotion.

All of us communicate nonverbally. Most of the time we're not aware that we're doing it. We gesture with eyebrows or a hand, meet someone else's eyes and look away, shift positions in a chair. We assume that our actions are random and incidental. When we respond to nonverbal cues from others, we sometimes recognize those cues consciously but more often we react to them on an intuitive level.

Usually, the nonverbal communication acts to qualify the verbal. What these nonverbal elements express very often is the emotional side of the message.

However, it isn't just feelings that are expressed nonverbally. One of the surprises is that gestures constitute almost a parallel language. We wind up a question with a lift of the hand, a tilt of the chin or widening of the eyes.

One of the most potent elements in body language is eye behavior. You shift your eyes, meet another person's gaze or fail to meet it - and produce an effect out of all proportion to the trifling muscular effort you've made. Much of eye behavior is so subtle that we react to it only on the intuitive level. The next time you have a conversation with someone who makes you feel liked, notice what he does with his eyes. Chances are he looks at you more often than is usual with glances a little longer than the normal. You interpret this as a sign, a polite one, that he is interested in you as a person rather than just in the topic of conversation. Probably you also feel that he is both self-confident and sincere.

People who can successfully control their faces are often unaware of what their hands, legs and feet may be doing; or else they just can't prevent signs of tension and anxiety from leaking out. Anxiety is one emotion feet and legs may reveal. Rage is another. During arguments the feet often tense up.

Sometimes a person signals his inner emotions by his posture. He may be sitting, for example, in a very tense way. People are not labelled as relaxed when they sit with tense hands in a rigid posture. People who slump over or forward slightly are usually judged moderately relaxed. People who lean far back and to one side are usually judged as most relaxed.

Congruent postures sometimes offer a guide to broad relationships within a group. Imagine that at the end of a party the remaining guests have been fired up by an argument over student

radicalism. Soon you may be able to spot at a glance the two sides of the argument by postures adopted. Most of the pros may sit with crossed knees, the cons with legs stretched out and arms folded. A few middle-of-the-roaders may try a little of each - crossing their knees and folding their arms. If an individual abruptly shifts his body around in his chair, it may mean that he disagrees with the speaker or even that he is changing sides. None of this, of course, represents an infallible guide to group-watching. If you try to check it out, you may find several pros in the con posture and when your neighbor squirms in his chair it may turn out to be because his leg went to sleep. But congruent postures are apparently significant enough of the time to be worth watching for. Postural shifts sometimes parallel spoken language.

A man's sense of self apparently is not bound by his skin. He walks around inside a kind of private bubble, which represents the amount of air-space he feels he must have between himself and other people. This is a truth anyone can easily demonstrate by moving in gradually on another person. At some point the other will begin, irritably or perhaps just absentmindedly, to back away. Anthropologists working with cameras have recorded the tremors and minute eye movements that betray the moment when the bubble is breached.

When forced to share his bubble of space with another, for example, in a crowded elevator, we often compensate for the unwanted intimacy in a number of ways. One may shift his eyes and shift his body so that he doesn't face anyone directly. If forced into actual contact with another person, one may hold part of his body rigid.

The amount of space a man needs is also influenced by his personality, introverts, for example, seem to need more elbow room than extroverts. The amount of space is also determined by the way the person feels about the person he is with. If he dislikes him or if the other outranks him, then he will stand further away.

Communication between human beings would be very dull if it were all done with words alone. Words are often the smallest part of communication. It is sometimes fun to put words aside and become aware of the rest of what goes on when people meet face to face! (Scheflen & Scheflen, 1972; David, 1971)

Discussion:

1. What are some of the emotions mentioned in these paragraphs which are communicated with nonverbal behaviors? Can you think of others which were not discussed? Give examples, perhaps by demonstrating how these emotions are communicated.
2. Have you experienced an intrusion upon your air-space? What were your reactions? How did you feel? How can you utilize this concept of relationships to increase your effectiveness as a communicator? Consider the amount needed with different types of relationships (i. e. friends, superiors, family, acquaintances, teachers).
3. Also take a look at some of the pictures in the black book by Scheflen. It might be helpful in giving you ideas about ways people relate nonverbally in different situations. If you want to mention some of these to the group, that would be fine.

Self-Concept

Self theory is strongly phenomenological in nature and based upon the general principle that man reacts to his phenomenal world in terms of the way he perceives this world. Probably the most salient feature of each person's world is his own self: the self as seen, perceived, and experienced by him. This is the perceived self or the individual's self concept. The term self concept is much more commonly used than the simpler term self, because man is not always aware of his absolute, true, or actual self but only of his own concepts and perceptions of himself. The self concept, or self image, is learned by each person through his lifetime of experiences with himself, with other people, and with the realities of the external world.

The term actualize is defined by Webster as "to make actual or real; realize in action". These meanings are very close to those intended by Maslow, who has popularized the term self-actualization in behavioral science. This term refers to the process of making actual or real, of implementing or putting into motion, the potential resources of an individual. Maslow proposes that the need for self-actualization, the drive to become what one is capable of being, is a basic force that influences and motivates much of man's behavior. His concept of self-actualization is central to the field of humanistic psychology with its emphasis on maximal development of human potential.

The individual's conception of himself emerges from social interaction and, in turn, guides or influences the behavior of that

individual. The following are implicit in most considerations of the self concept which take this stance and are suggested as basic postulates of the theory: (1) the individual's self concept is based on his perception of the way others are responding to him; (2) the individual's self concept functions to direct his behavior; and (3) the individual's perception of the responses of others toward him.

Self theorists have often emphasized the influence that the self, or one's identity, has upon one's behavior. If I am asked to dance and "dancer" is not part of my identity or my behavioral repertoire, then I will probably decline to dance. However, the converse influence that behavior has upon identity is not always recognized. In order to be something, one generally has to do something; but in order to do something, one generally must be something. In order to dance I have to be a dancer, and in order to be a dancer I have to dance.

There seems to be a basic motivation within man to maintain and enhance the phenomenal self. Self-esteem is strongly dependent on self-enhancement, for anything that is self-enhancing increases self-esteem. Self-esteem is also related to maintenance of the self, or self concept, because revisions of the self concept that entail the risk of lowered self-esteem are threatening and therefore resisted.

Although theories of self concept development vary considerably, there is general agreement that the self concept does not exist at birth. The origin of the self concept is described as follows: the self begins to develop gradually as perceptive powers develop and one learns to recognize and distinguish others before one learns to

recognize and distinguish the self. As the mother begins to take shape as a separate person the baby forms vague notions of himself as a separate individual. The family provides the individual with his earliest experiences with (1) feelings of adequacy or inadequacy, (2) feelings of acceptance or rejection, (3) opportunities and behaviors. From family members and later from significant other people, the individual learns the values which he attaches to his perceptions of himself. The person often evaluates himself by the perception of others' behaviors toward him. To a considerable degree a person's view of himself depends upon the way he is treated or judged by others.

Most self theorists agree that the self concept, once clearly differentiated and structured, is a fairly stable entity. However, they also agree that throughout life the self concept is continually developing and changing.

It has been hypothesized by many that the positive self concept or healthy personality is primarily shaped by the frequency and intensity of positive experiences. From several studies it appears that persons with basically positive self concepts are more able to use both positive and negative experiences as learning situations and are more open to additional experiences. In contrast, persons who were assessed to have negative self concepts reported that negative experiences had been the most significant ones in their lives, and that the effect of these negative experiences had been to close up the persons so that in future experiences they were more defensive and wary of life.

Many believe that the self concept is closely related to the level of behavioral competence. The more positive a person's self concept the more competent he is in performing the tasks of daily life. It is also believed true that the higher the frequency of positive experiencing for the person, the more positive that person's self concept will be. Additional studies have reported that persons who were perceived by their peers as being unusually effective, typically evidenced more positive self concepts than did persons who were perceived as more nearly average in their day-to-day behavior. It does seem certain that there is a significant interaction between experiencing and the development or modification of self perceptions. Therefore if we can enhance a person's self concept, we can increase his effectiveness in handling interpersonal relationships within his home and work environment and generally promote his potentialities.

A study to test this hypothesis that self concept influences learning, motivation, task performance and overall job performance was conducted by Baron and Bass (1969). They studied the influence of social praise of the person (social reinforcement) upon the performance of 35 Negro girls, aged 16 to 21, who were enrolled in a nurses aid training program. By praising the aides for performance ("You have done a fine job", "That was very good", "You look very nice today", "I am very pleased with your day's work", etc.) the experimenters were able to significantly change the aides' self concepts and performances in a positive direction. These changes were brought about in a matter of two weeks. (Fitts, 1971 & 1972)

Discussion:

1. What are the implications of what you have read? What have you learned that could help you improve your own feelings about yourself? From these paragraphs what have you learned that could help you to increase the self concepts of your friends, your family, and those with whom you now work or will in the future? Support your answer, so that the other members of the group can understand your reasoning.
2. How can this knowledge benefit you as a nurse? Can you influence the behaviors of those with whom you work? Support your answer.
3. How can we within this group help each other to have more positive self concepts?

APPENDIX C

(FORMS UTILIZED TO COLLECT DATA)

Personal Reaction Inventory

Date: _____

Name: _____

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Write T or F in front of each statement.

____ 1. Before voting I thoroughly investigate the qualifications of all the candidates.

____ 2. I never hesitate to go out of my way to help someone in trouble.

____ 3. It is sometimes hard for me to go on with my work if I am not encouraged.

____ 4. I have never intensely disliked anyone.

____ 5. On occasion I have had doubts about my ability to succeed in life.

____ 6. I sometimes feel resentful when I don't get my way.

____ 7. I am always careful about my manner of dress.

____ 8. My table manners at home are as good as when I eat out in a restaurant.

____ 9. If I could get into a movie without paying and be sure I was not seen I would probably do it.

____ 10. On a few occasions, I have given up doing something because I thought too little of my ability.

____ 11. I like to gossip at times.

____ 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

____ 13. No matter who I'm talking to, I'm always a good listener.

____ 14. I can remember "playing sick" to get out of something.

____ 15. There have been occasions when I took advantage of someone.

___ 16. I'm always willing to admit it when I make a mistake.

___ 17. I always try to practice what I preach.

___ 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.

___ 19. I sometimes try to get even rather than forgive and forget.

___ 20. When I don't know something I don't at all mind admitting it.

___ 21. I am always courteous, even to people who are disagreeable.

___ 22. At times I have really insisted on having things my own way.

___ 23. There have been occasions when I felt like smashing things.

___ 24. I would never think of letting someone else be punished for my wrongdoings.

___ 25. I never resent being asked to return a favor.

___ 26. I have never been irked when people expressed ideas very different from my own.

___ 27. I never make a long trip without checking the safety of my car.

___ 28. There have been times when I was quite jealous of the good fortune of others.

___ 29. I have almost never felt the urge to tell someone off.

___ 30. I am sometimes irritated by people who ask favors of me.

___ 31. I have never felt that I was punished without cause.

___ 32. I sometimes think when people have a misfortune they only got what they deserved.

___ 33. I have never deliberately said something that hurt someone's feelings.

Be sure you have answered each item. Thank you.

Patient Response Form

Student's Name _____

Date _____

In an effort to improve nursing education, we are studying the care given by nursing students in several hospitals. As a patient, you can help by answering the following questions about the care you received today. Please be frank. The information is confidential and the student will not be graded on the basis of your answers.

The items describe certain attributes of a nurse's functioning. I would like you, in answering each item, to think about how well it describes the nursing student who cared for you today. The following are response alternatives:

1 means disagree strongly
2 means disagree moderately
3 means undecided
4 means agree moderately
5 means agree strongly

Please circle the most appropriate answer.	Dis. Str.	Dis. Mod.	Und.	Agr. Mod.	Agr. Str.
a. The student seems to understand my feelings.	1	2	3	4	5
b. The student does not listen to me.	1	2	3	4	5
c. The student makes me feel safe physically.	1	2	3	4	5
d. The student is in a hurry to leave me.	1	2	3	4	5
e. I feel comfortable when the student is with me.	1	2	3	4	5
f. I would not like to have this student care for me again.	1	2	3	4	5
g. The student avoids difficult or touchy issues.	1	2	3	4	5

	Dis. Str.	Dis. Mod.	Und.	Agr. Mod.	Agr. Str.
h. The student is very warm and friendly.	1	2	3	4	5
i. The student seems bored and uninvolved.	1	2	3	4	5
j. The student seems sure of the care she (he) gives.	1	2	3	4	5

Thank you.

Instructor Response Form

Student's Name _____

Date _____

1 means disagree strongly
2 means disagree moderately
3 means undecided
4 means agree moderately
5 means agree strongly

Please circle the most appropriate answer. If you cannot rate the student on the item, please circle 3.

		Dis. Str.	Dis. Mod.	Und.	Agr. Mod.	Agr. Str.
a.	The student seems to have a positive attitude about her (him) self.	1	2	3	4	5
b.	The student contributes to group activities (such as clinical conferences) in accord with his (her) ability.	1	2	3	4	5
c.	The student does not express an awareness of others' feelings (e. g. the instructor, the patient).	1	2	3	4	5
d.	The student seems anxious in the presence of authority figures (e. g. the instructor, the doctor, or the head nurse).	1	2	3	4	5
e.	The student seems sensitive to his (her) own feelings.	1	2	3	4	5
f.	The student openly expresses negative feelings.	1	2	3	4	5
g.	The student openly expresses positive feelings.	1	2	3	4	5
h.	I enjoy talking with and working with this student.	1	2	3	4	5

		Dis. Str.	Dis. Mod.	Und.	Agr. Mod.	Agr. Str.
i.	The student seems offended by constructive criticism.	1	2	3	4	5
j.	The student does not assume responsibility for his (her) actions.	1	2	3	4	5
k.	The student has difficulty expressing ideas well and understandably.	1	2	3	4	5
l.	The student seems confident of his (her) ability to perform nursing functions.	1	2	3	4	5

Thank you.

Please choose the response in each situation below which could best be described as assertive, according to the following definitions:

Assertive behaviors are "all socially acceptable expressions of personal rights and feelings" and "behavior which enables a person to act in his own best interests, to stand up for himself without undue anxiety, to exercise his rights without denying the rights of others" (Wolpe & Lazarus, 1966, p. 39 and Alberti & Emmons, 1970, p. 7).

1. You are giving the nursing care to a patient who is unconscious because of a head injury. His rectal temperature is 102 degrees F. The doctor-in-charge has ordered a fan to cool the environment of the patient. You are present at the bedside during the doctors' morning rounds. One of the physicians changes the angle of the fan so that the stream of air is directly on the patient, and he remarks to you: "Keep the fan this way". Your response to him would be:

___ a. "I am sorry. I thought the fan was supposed to be placed that way. I'll be sure that everyone keeps it this way."

___ b. "Yes, sir." After the doctors have left the patient's room, return the fan to the original position. Later try to talk privately with the doctor, who changed the position of the fan, to explain the reasons for the fan's original position.

_9_ c. "The fan is being utilized to cool the patient's environment and subsequently decrease his temperature. I think that this position could cause chilling, which would reverse the process." Return the fan to its original position.

1 d. "Aren't you afraid he might develop pneumonia from the draft?" If the doctor does not think this could happen, leave the fan as he has placed it.

2. You are making rounds with the medical staff. The group approaches a patient's room in which protective isolation is being utilized. The patient has leukemia. The doctor at the front of the group begins to open the patient's door without properly gowning and gloving. You would:

___ a. Put on a gown and gloves to set a good example for the doctors.

1 b. Hand the doctor a gown and gloves. If he does not use them, report the incident to the head nurse.

8 c. "Excuse me, Dr. Smith, but this patient is on protective isolation. Would you please gown and glove?"

1 d. "Do you wish to discontinue the isolation order that we have been following? If it is no longer necessary I'll be glad to bring you the order book!"

3. While copying medication orders, you notice that Dr. White has ordered a toxic dosage of Ampholylin for a patient. Dr. White is seated in the nurse's station talking with another doctor. You would:

___ a. Call the pharmacy to make sure that I am correct about the level of the dosage. Report the discrepancy to the head nurse so that she may talk with Dr. White about the excessive dosage.

___ b. Approach Dr. White when he is alone, tactfully stating: "Excuse me, but did you mean to order this dosage?" Follow his order, if he says that he will take responsibility for the drug's effect.

1 c. Call the pharmacy to check that I am correct about the levels of toxicity. Approach Dr. White and state: "Excuse me. I am sorry to bother you, but I have a question about this order, because the pharmacist thinks that the level is too high." Follow the doctor's recommendation about the administration.

9 d. Approach Dr. White, and state: "Excuse me, but I noticed you ordered this dosage of Ampholylin, which is considered to be toxic. I cannot administer the medication as the order presently reads."

4. You have been asked by a doctor to take a telephone order for a medication. It is a policy of the hospital that medication orders are to be written by the physicians before being carried out by the nurse. This policy is fairly often not adhered to. You would:

___ a. Take the order, but remind the doctor of the hospital's policy concerning telephone orders.

1 b. Take the order. Ask another nurse to listen to the order, so that I can be sure of the correctness of the order. If this continues to happen, report it to the supervisor so that she can handle the problem.

8 c. Tell the doctor that I cannot take a telephone order, stating that it is against the hospital's policy and a danger to the patient's welfare.

1 d. Try to find another physician so that he may listen to the order and write it. If this is not possible, take the order, but ask the doctor to please sign it as soon as he comes to the hospital.

5. You are assisting a doctor who is changing a sterile dressing. The patient is unconscious. The doctor contaminates his glove. As you offer the doctor a sterile glove, he states, "Oh, never mind, that isn't necessary". You would:

1 a. Humor him into putting on a sterile glove by saying: "Oh, it will only take a minute to change".

___ b. Say nothing, because he is a doctor and it is not my place to teach him sterile technique.

9 c. State: "Perhaps you didn't notice, but you touched the contaminated linen. Please change your glove to protect the patient."

___ d. Ask: "Is sterile technique no longer necessary?" If he still didn't change his glove, my respect for him would certainly decrease.

Thank you.

School: _____ Date: _____

Name: _____

INSTRUCTIONS: The following five nursing situations have been constructed to assess the reactions of nursing students. Your response will be kept confidential and will in no way influence your grades within your individual nursing schools. Please circle the response which most clearly describes what you would do or say in each situation. Be sure you choose the one which you would actually perform, not that which you feel would be expected of you.

1. You are giving the nursing care to a patient who is unconscious because of a head injury. His rectal temperature is 102 degrees F. The doctor-in-charge has ordered a fan to cool the environment of the patient. You are present at the bedside during the doctors' morning rounds. One of the physicians changes the angle of the fan so that the stream of air is directly on the patient, and he remarks to you: "Keep the fan this way." Your response to him would be:

   a. "I am so sorry. I thought the fan was supposed to be placed that way. I'll be sure that everyone keeps it this way."

   b. "Yes, sir." After the doctors have left the patient's room, return the fan to the original position. Later try to talk privately with the doctor, who changed the position of the fan, to explain the reasons for the fan's original position.

   c. "The fan is being utilized to cool the patient's environment and subsequently decrease his temperature. I think that this

position could cause chilling, which would reverse the process." Return the fan to its original position.

d. "Aren't you afraid he might develop pneumonia from the draft?" If the doctor does not think this could happen, leave the fan as he has placed it.

Please rate the extent of your anxiety during this situation. Check the appropriate box:

Most Anxious You Have Ever Been									Most Relaxed You Have Ever Been
1	2	3	4	5	6	7	8	9	10
___	___	___	___	___	___	___	___	___	___

2. You are making rounds with the medical staff. The group approaches a patient's room in which protective isolation is being utilized. The patient has leukemia. The doctor at the front of the group begins to open the patient's door without properly gowning and gloving. You would:

a. Put on a gown and gloves to set a good example for the doctors.

b. Hand the doctor a gown and gloves. If he does not use them, report the incident to the head nurse.

c. "Excuse me, Dr. Smith, but this patient is on protective isolation. Would you please gown and glove?"

d. "Do you wish to discontinue the isolation order that we have been following? If it is no longer necessary I'll be glad to bring you the order book!"

Please rate the extent of your anxiety during this situation. Check the appropriate box:

Most Anxious You Have Ever Been									Most Relaxed You Have Ever Been
1	2	3	4	5	6	7	8	9	10
___	___	___	___	___	___	___	___	___	___

3. While copying medication orders, you notice that Dr. White has ordered a toxic dosage of Ampholylin for a patient. Dr. White is seated in the nurse's station talking with another doctor. You would:

   a. Call the pharmacy to make sure that I am correct about the level of the dosage. Report the discrepancy to the head nurse so that she may talk with Dr. White about the excessive dosage.

   b. Approach Dr. White when he is alone, tactfully stating: "Excuse me, but did you mean to order this dosage?" Follow his order, if he says that he will take responsibility for the drug's effect.

   c. Call the pharmacy to check that I am correct about the levels of toxicity. Approach Dr. White and state: "Excuse me. I am sorry to bother you, but I have a question about this order, because the pharmacist thinks that the level is too high." Follow the doctor's recommendation about the administration.

   d. Approach Dr. White, and state: "Excuse me, but I noticed you ordered this dosage of Ampholylin, which is considered

to be toxic. I cannot administer the medication as the order presently reads."

Please rate the extent of your anxiety during this situation. Check the appropriate box:

Most Anxious You Have Ever Been									Most Relaxed You Have Ever Been
1	2	3	4	5	6	7	8	9	10
___	___	___	___	___	___	___	___	___	___

4. You have been asked by a doctor to take a telephone order for a medication. It is a policy of the hospital that medication orders are to be written by the physician before being carried out by the nurse. This policy is fairly often not adhered to. You would:
   a. Take the order, but remind the doctor of the hospital's policy concerning telephone orders.
   b. Take the order. Ask another nurse to listen to the order, so that I can be sure of the correctness of the order. If this continues to happen, report it to the supervisor so that she can handle the problem.
   c. Tell the doctor that I cannot take a telephone order, stating that it is against the hospital's policy and a danger to the patient's welfare.
   d. Try to find another physician so that he may listen to the order and write it. If this is not possible, take the order, but ask the doctor to please sign it as soon as he comes to the hospital.

Please rate the extent of your anxiety during this situation. Check the appropriate box:

Most Anxious You Have Ever Been									Most Relaxed You Have Ever Been
1	2	3	4	5	6	7	8	9	10
___	___	___	___	___	___	___	___	___	___

5. You are assisting a doctor who is changing a sterile dressing. The patient is unconscious. He contaminates his glove. As you offer the doctor a sterile glove, he states, "Oh, never mind, that isn't necessary". You would:

   a. Humor him into putting on a sterile glove by saying: "Oh, it will only take a minute to change".

   b. Say nothing, because he is a doctor and it is not my place to teach him sterile technique.

   c. State: "Perhaps you didn't notice, but you touched the contaminated linen. Please change your glove to protect the patient."

   d. Ask: "Is sterile technique no longer necessary?" If he still didn't change his glove, my respect for him would certainly decrease.

Please rate the extent of your anxiety during this situation. Check the appropriate box:

Most Anxious You Have Ever Been									Most Relaxed You Have Ever Been
1	2	3	4	5	6	7	8	9	10
___	___	___	___	___	___	___	___	___	___

Form Utilized to Rate Experimenter-Bias

Please choose one segment from each tape. Rate each according to the following definition of warmth. You are rating the performance of the therapist on each occasion.

Warmth - expresses an openness to both the good and bad that lives within others and ourselves; communicates a very deep interest and concern for the welfare of the clients; allows the clients to be free to be themselves even if this means that the clients are defensive, or express dislike or rejection of the therapist; the clients are liked for themselves by the therapist; the therapist seems to respect the worth of the clients as persons; and provides a trusting and safe atmosphere for the clients.

	Very Warm				No Warmth
Tape E	X	X	____	____	____
Tape IPR	X	X	____	____	____

Choose two more segments from the tapes. Rate each of the segments according to the following definition of genuineness.

Genuineness - the therapist speaks spontaneously; seems to say what she feels or means, not what is appropriate; the therapist openly expresses concern for others and positive feelings for others; she seems authentic and nondefensive; the therapist seems sensitive to others' feelings, values, aspirations, beliefs, and perceptions.

	Very Genuine				Not Genuine At All
Tape E	X X	____	____	____	____
Tape IPR	X X	____	____	____	____

Finally choose another segment from each tape and rate the performance of the therapist according to the following definition of empathic understanding.

Empathic understanding - the therapist is able to perceive and communicate accurately and with sensitivity both the feelings and experiences of the clients; the therapist clarifies and expands upon the clients' verbalizations and behaviors; she acknowledges the feelings of the clients and offers to the clients additions and expansions of their feelings.

	Very Understanding				No Understanding Demonstrated
Tape E	X	X	____	____	____
Tape IPR	X	X	____	____	____

APPENDIX D

(TABLES OF STATISTICS)

TABLE 5

Frequency of Assertive and Nonassertive Behaviors

	Cell Frequency Distribution	
	Experimental	IPR
Assertive	8	2
Nonassertive	2	2

$p = .27$, Fisher Exact Test.

TABLE 6

Frequency of Assertive and Nonassertive Behaviors

	Cell Frequency Distribution	
	IPR	Control
Assertive	2	3
Nonassertive	2	7

$p = .36$, Fisher Exact Test.

TABLE 7

Analysis of Variance of Statement C

Source	df	MS	F
Treatment	2	6.8	3.92*
Error	27	1.73	
Total	29		

* $p < .05$.

TABLE 8

Pre and Post Group Means for Statement C on Instructor Response Form

Subjects	N	Pre	Post
Experimental Group	10	2.197	1.502
IPR Group	10	2.364	2.715
Control Group	10	2.697	3.630

Note. - The most desirable rating for this statement was 1.

The degree of association (w^2) showed that 17% of the variance was determined by the treatment group.

TABLE 9

Analysis of Variance of Statement D

Source	df	MS	F
Treatment	2	25.84	16.35**
Error	27	1.58	
Total	29		

** $p < .01$.

TABLE 10

Pre and Post Group Means for Statement D on Instructor Response Form

Subjects	N	Pre	Post
Experimental Group	10	4.332	1.671
IPR Group	10	4.832	4.009
Control Group	10	4.131	4.197

Note. - The most desirable rating for this statement was 1.

The degree of association (w^2) showed that 52% of the variance was determined by the control group.

TABLE 11

Analysis of Variance of Statement G

Source	df	MS	F
Treatment	2	24.23	16.45**
Error	27	1.47	
Total	29		

** $p < .01$.

TABLE 12

Pre and Post Group Means for Statement G on Instructor Response Form

Subjects	N	Pre	Post
Experimental Group	10	2.897	4.826
IPR Group	10	3.565	2.953
Control Group	10	3.097	2.198

Note. - The most desirable rating for this statement was 5.

The degree of association (w^2) showed that 52% of the variance was determined by the treatment group.

TABLE 13

Analysis of Variance of Statement I

Source	df	MS	F
Treatment	2	34.70	22.15**
Error	27	1.57	
Total	29		

** $p < .01$.

TABLE 14

Pre and Post Group Means for Statement I on Instructor Response Form

Subjects	N	Pre	Post
Experimental Group	10	3.297	1.413
IPR Group	10	2.564	4.195
Control Group	10	3.430	4.376

Note. - The most desirable rating for this statement was 1.

The degree of association (w^2) showed that 60% of the variance was determined by the treatment group.

TABLE 15

Analysis of Variance of Statement J

Source	df	MS	F
Treatment	2	8.45	4.82*
Error	27	1.75	
Total	29		

* $p < .05$.

TABLE 16

Pre and Post Group Means for Statement J
on Instructor Response Form

Subjects	N	Pre	Post
Experimental Group	10	2.231	1.396
IPR Group	10	2.196	2.183
Control Group	10	2.197	3.197

Note. - The most desirable rating for this statement was 1.

The degree of association (w^2) showed that 21% of the variance was determined by the treatment group.

TABLE 17

Analysis of Variance of Statement K

Source	df	MS	F
Treatment	2	23.42	13.88**
Error	27	1.69	
Total	29		

** $p < .01$.

TABLE 18

Pre and Post Group Means for Statement K
on Instructor Response Form

Subjects	N	Pre	Post
Experimental Group	10	3.663	1.417
IPR Group	10	3.597	3.548
Control Group	10	3.431	4.129

Note. - The most desirable rating for this statement was 1.

The degree of association (w^2) showed that 48% of the variance was determined by the treatment group.

TABLE 19

Analysis of Variance of Statement L

Source	df	MS	F
Treatment	2	11.31	8.74**
Error	27	1.29	
Total	29		

** $p < .01$

TABLE 20

Pre and Post Group Means for Statement L on Instructor Response Form

Subject	N	Pre	Post
Experimental Group	10	3.597	4.707
IPR Group	10	3.597	4.309
Control Group	10	3.931	3.033

Note. - The most desirable rating for this statement was 5.

The degree of association (w^2) showed that 36% of the variance was determined by the treatment group.

TABLE 21

Tests on Differences between All Pairs of
Change Scores - Statement C

Treatments		Exp.	IPR	Con.		
	Mean Change	- .695	.351	.933	r	Newman-Keuls
Exp.	- .695	—	1.046	1.628*	3	1.456
IPR	.351	—	—	.582	2	1.20
Con.	.933	—	—	—		

* $p < .05$.

TABLE 22

Tests on Differences between All Pairs of
Change Scores - Statement D

Treatments		Exp.	IPR	Con.		
	Mean Change	-2.661	-.823	.066	r	Newman-Keuls
Exp.	-2.661	—	1.838**	2.727**	3	1.789
IPR	- .823	—	—	.889	2	1.584
Con.	.066	—	—	—		

** $p < .01$.

TABLE 23

Tests on Differences between All Pairs of
Change Scores - Statement G

Treatments		Con.	IPR	Exp.		
	Mean Change	- .899	-.612	1.929	r	Newman-Keuls
Con.	- .899	—	.287	2.828**	3	1.724
IPR	- .612	—	—	2.541**	2	1.528
Exp.	1.929	—	—	—		

** $p < .01$.

TABLE 24

Tests on Differences between All Pairs of
Change Scores - Statement I

Treatments		Exp.	Con.	IPR		
	Mean Change	-1.884	.946	1.631	r	Newman-Keuls
Exp.	-1.884	--	2.830**	3.515**	3	1.783
Con.	.946	--	--	.685	2	1.580
IPR	1.631	--	--	--		

** $p < .01$.

TABLE 25

Tests on Differences between All Pairs of
Change Scores - Statement J

Treatments		Exp.	IPR	Con.		
	Mean Change	- .835	-.013	1.00	r	Newman-Keuls
Exp.	- .835	--	.822	1.835*	3	1.47
IPR	- .013	--	--	1.013	2	1.21
Con.	1.000	--	--	--		

* $p < .05$.

TABLE 26

Tests on Differences between All Pairs of
Change Scores - Statement K

Treatments		Exp.	IPR	Con.		
	Mean Change	-2.246	-.049	.698	r	Newman-Keuls
Exp.	-2.246	--	2.197**	2.944**	3	1.845
IPR	- .049	--	--	.747	2	1.636
Con.	.698	--	--	--		

** $p < .01$.

TABLE 27

Tests on Differences between All Pairs of Change Scores - Statement L

Treatments		Con.	IPR	Exp.		
	Mean Change	- .898	.712	1.110	r	Newman-Keuls
Con.	- .898	—	1.610*	2.008**	3	1.612
IPR	.712	—	—	.398	2	1.429
Exp.	1.110	—	—	—		

* $p < .05$.
** $p < .01$.

TABLE 28

Responses of R. N.'s and Subjects on the Assertive Inventory

Situation	R. N.'s	Experimental Groups		
		Exp.	IPR	Control
No. 1	9 - C	6 - C	7 - C	8 - C
	1 - D	1 - D	0 - D	0 - D
		3 - B	1 - B	1 - B
		0 - A	2 - A	1 - A
No. 2	8 - C	8 - C	7 - C	9 - C
	1 - B	2 - B	1 - B	0 - B
	1 - D	0 - D	2 - D	1 - D
No. 3	9 - D	8 - D	9 - D	8 - D
	1 - C	0 - C	0 - C	2 - C
		2 - B	1 - B	0 - B
No. 4	8 - C	8 - C	6 - C	9 - C
	1 - B	1 - B	3 - B	0 - B
	1 - D	1 - D	1 - D	1 - D
No. 5	9 - C	9 - C	7 - C	8 - C
	1 - A	0 - A	3 - A	0 - A
		1 - D	0 - D	2 - D

Note. - Hyphen (-) depicted the subjects' choices.

TABLE 29

Mean Response of R. N.'s and Subjects on the Fear Thermometer

Situation	50 R. N.'s	Experimental Groups		
		Exp.	IPR	Control
No. 1	5	4.4	4.8	5.0
No. 2	4	4.9	5.2	4.6
No. 3	5	4.6	4.9	3.5
No. 4	5	6.6	4.4	6.2
No. 5	4	4.5	5.4	5.4

TABLE 30

Mean Grade Point Average of
Groups Prior to Testing

Group	Mean G. P. A.
Experimental	82.1
IPR	82.3
Control	84.7

TABLE 31

Analysis of Variance of Grade Point
Averages Prior to Testing

Sources	df	MS	F
Treatment	2	103.6	.38[a]
Error	27	272.56	
Total	29		

[a] Value is not significant at .05.